

Region 1 Invasive Species Proposal

Willamette Valley NWRC #2

Baskett Butte Oak Savannah Restoration-Phase 2

Baskett Slough NWR, Dallas, OR

Project Description

This project is a follow-up to the 2010 project that removed three invasive tree species across 85 acres on Baskett Butte at Baskett Slough NWR. Succession by Douglas fir, bitter cherry, and big-leaf maple, as a result of decades of fire suppression, threatened the integrity of Oregon white oak habitat. This affected historic native prairie occupied by Fender's blue butterfly, by isolating habitat and eliminating corridors, as well as crowding out and shading the herbaceous native understory. The trees have been cut, with helicopter yarding planned for June 2011. The majority of the logs will be used by the Portland Water Bureau for stream restoration in the Bull Run Watershed.

The project focuses on preventing approximately 50 acres within/adjacent to the 2010 treatment area from being overtaken by invasive species. The primary threats to the site are Himalayan blackberry, poison oak, Douglas fir seedlings, and tall oatgrass. The two shrub species are the most immediate threat, because both will respond to the increase in sunlight. As shrubs, they would quickly dominate the understory with woody vegetation when herbaceous vegetation is the desired condition. Tall oatgrass may not be an immediate threat, but needs to be treated on lands immediately adjacent to the project to stop an infestation on to vulnerable exposed ground where the fir was removed. The young Douglas fir are a long term threat, but easiest to address at this growth stage.

Comment [BFW1]: Doesn't sound like eradication. Just maintenance/prevention. It's good they are being proactive though.

Mechanical treatment of woody vegetation is preferred initially, followed by herbicide treatment of the re-growth. Douglas fir seedlings can be easily cut out by hand crews with no threat of reinvasion. Control of tall oatgrass is best accomplished with a grass specific herbicide treatment in the early spring, or late spring weed-wiping with glyphosate. In the area where a large number of trees were removed, stump grinding is required prior to use of mowing to facilitate equipment use. Shiny geranium, an invasive forest forb presently dominant in much of the understory, will not be a problem. In fact, the increase in sunlight exposure is expected to eliminate the geranium from much of the site. All open and disturbed ground will be covered with native upland prairie seed in the Fall 2011 following log removal.

Refuge Purpose/Biological Integrity

Baskett Slough NWR was established in part to conserve and protect migratory birds, and specifically the uplands for wildlife habitat and watershed protection. In the Willamette Valley, Oregon white oak habitat has declined dramatically since pre-settlement conditions, such that 90% has been lost to several causes, with the largest being forest succession by invading Douglas-fir. Savannah oak habitat with a herbaceous understory

is considered vital habitat for many migratory birds including FWS Species of Concern, the endangered Fender's blue butterfly, and three other listed plants.

Project Partners

The Refuge is working in conjunction with the adjacent landowner to establish a larger block of habitat and be more effective towards recovery of all the prairie species (specifically to establish corridors for Fender's blue butterfly to facilitate movement between Refuge-TNC populations). These adjacent lands are covered by an NRCS conservation easement and a TNC easement. Funding for restoration work off-Refuge has already been secured from several sources.

The NW Youth Corps crews will contribute by piling any residual woody debris remaining from the tree removal for subsequent burning, and slashing seedling trees.

Monitoring

Pre-treatment conditions are well documented in an existing Basket Butte Management Plan (Salix 2005). Vegetative plant community monitoring is planned for the 1st and 2nd year following treatment. Butterfly monitoring, which occurs annually on Baskett Butte, will be expanded into the restored areas in future years once prairie vegetation is well established.

Proposed Budget:

Mechanical treatments (FWS and contract) \$18,000
Herbicide treatments (FWS and contract) \$ 7,000

Total Invasive Species Project Request **\$25,000**

Refuge Point of Contact:

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